

FREE!

RUBY-TAILED
WASP POSTER



**HITCH
HIKERS**

Meet the creatures
looking for a free ride

**SMALL BUT
MIGHTY**

Little animals
with a big impact



Issue 109 Spring 2024

Wildlife Watch

MAGAZINE

SUPER SNOOTS

Nature's strangest noses



The
Wildlife
Trusts



Editor's corner

TOM HIBBERT
Editor, Wildlife Watch

Hurray, spring is here! I can't wait to see all of the insects appearing again. I love bees and butterflies, but the minibeasts that excite me most at the moment are beetles. They come in so many colours, shapes and sizes. And there are so many beetles in the UK that there's always something new to discover!

One of the biggest beetles I often see in spring is the black oil beetle. Young oil beetles have a really strange trick – they ride on the backs of bees! You can learn all about this bizarre behaviour on page eight.

What wild wonders are you most looking forward to seeing this spring? Maybe it's a beautiful flower blooming in a meadow, or a bird that's flown all the way from Africa to spend the summer here. Whatever it is, I hope you get plenty of time to enjoy it!

Tom



GET IN TOUCH

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WILD THINGS

News from our Wildlife Watchers

WE DIG IT!



Henry (aged 4) from Gloucestershire persuaded his grandma to help him build this fantastic hibernaculum. Hopefully it gave some reptiles and amphibians a nice place to shelter!

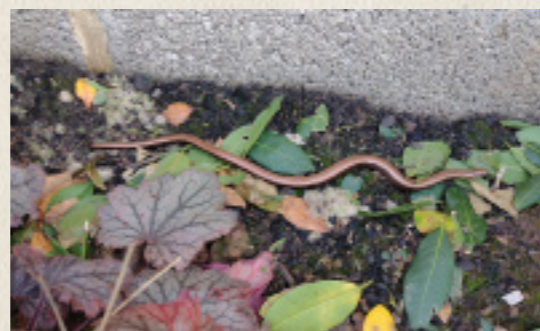
YOUNG EXPLORERS



Hannah (aged 11) and James (aged 8) from Somerset have spotted lots of great wildlife on their adventures, including this colourful wasp spider and this slinky slow-worm.

CONSERVATION CAFÉ

Seven-year-old Aila from Salisbury ran a Christmas café from a shed on her driveway. With help from her family, and friends Alice and Juliette, she raised £66 for Wiltshire Wildlife Trust. Great job, Aila!



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WILDLIFE WATCH 109

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What's Wildlife Watch?

Wildlife Watch is the junior branch of The Wildlife Trusts. Join Wildlife Watch and start your nature adventure. Prices range from £10-£24 per year for child-only membership and £30-£60 for family membership. You'll receive a starter pack and four issues of Wildlife Watch magazine a year. This is

packed full of amazing pictures, posters and competitions. We also have a really wild website and e-newsletter full of wild ideas and nature-spotting tips. Plus you get access to local events and groups. Go to wildlifewatch.org.uk to find out more.

KEEP WATCHING!

Cover pic of common shrew © Colin Vaindell / naturepl.com

The Scie⁷Nice Section

Always wondered what that weird-sounding word meant or desperate to know what the latest wonderful wildlife discovery is? Well, here we bring you a fact-packed science section so you can impress your friends with your knowledge!

WILD WORDS

Wow your friends with new words from the world of wildlife science!

EXUVIA (ex-zoo-vee-uh)

The skin or covering left behind after an animal has shed it. Young dragonflies leave an exuvia when they become adults.



NYMPH (nimf)

The name for the young life stages of an insect that doesn't change completely as it grows. Grasshoppers have nymphs, as they look like little versions of the adult.



IMAGO (ih-may-go)

The scientific name for an adult insect.



RECENT DISCOVERIES

THE PROOF IS IN THE PAWS

Did you know lynx used to live in Britain? They are elusive animals that can be quite hard to study. But scientists have found a new way to get information about them. The scientists collected snow from the pawprints left behind by lynx in Sweden. They melted the snow and managed to get some lynx DNA out of it. By studying the DNA, they could identify the individual lynx that made the pawprint! This new trick could help us learn much more about lynx, like how many lynx are in an area – just from studying pawprints!



Lynx © Juan and Rius / naturepl.com

SPACE WEATHER AND BIRDS

We know that migrating birds use the Earth's magnetic field to help them find their way on long journeys. But what if something happens to that magnetic field? Space weather, such as solar flares, can cause changes in the magnetic field. Scientists in America have found that this can create problems for birds that migrate at night. On nights with very strong space weather events, they recorded fewer birds migrating. The birds that did migrate seemed to have more trouble staying on the right track.



YOUR PHOTOS



Keep sharing your amazing photos with us, we love to see them all!



BOBBY (aged 9) shared this wonderful photo of a common darter. It's never easy to get a shot of a dragonfly, so great job Bobby!

SUMMER-JOY (aged 12) took this stunning portrait of a grey seal on a visit to a coastal colony, where seals come right up to the viewpoint. Most seals aren't this confident – so if you see one on a beach make sure to give it plenty of space and try not to get too close.



ABIGAIL (aged 9) spotted this small tortoiseshell butterfly in her garden, along with holly blues, peacocks, and red admirals. What a fantastic photo! It's really sharp and the colours are gorgeous.



LIAM (aged 12) was quick enough to snap this shot of a skulking water rail at Askham Bog in York. You can often hear water rails squealing in the reeds, but seeing them takes a lot of patience and a bit of luck!



Send your stories, ideas, and photos to watch@wildlifetrusts.org

Dabbling in duck migration

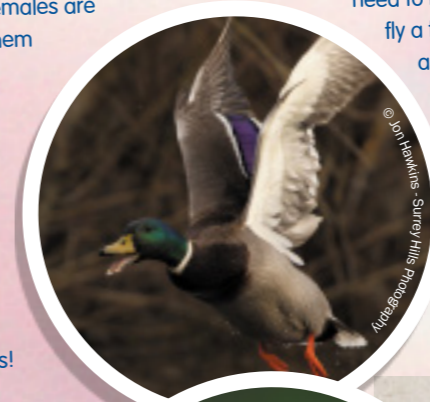
MALLARDS ON THE MOVE



MEET THE MALLARD

Have you seen a mallard lately? They're our most familiar duck, found on ponds and lakes across the UK. Males have a shiny green head that shimmers in the sunlight. Females are brown and streaky. This helps them stay hidden when they're sitting on their eggs, which are often laid in a nest on the ground. Males don't help out with the parenting duties, so they don't have to worry about blending in – just showing off to females!

The oldest known mallard lived for more than 20 years!



MALLARD MIGRATION

In the UK, you can see a mallard at any time of year. The birds that nest in our parks like to stay put; most don't wander far in winter. Because our winters are quite mild, they can find plenty of food and so don't need to leave. If we get really cold spells and lakes freeze over, they might fly a few miles to find a non-frozen lake. A few of our mallards can be a little more adventurous and fly south into continental Europe.

But some of the mallards you see in winter and early spring are different – they're travellers! Our mild winters attract mallards from many other countries. Thousands migrate here each autumn to stay for the winter. As spring arrives, they'll be making long journeys back to their nesting areas. They may be heading to Iceland, Russia, Finland or other parts Europe.

WADDLING ALL OVER THE WORLD

Mallards can be found all over the world. They nest across Europe and Asia, from the UK to Japan, as well as in North America. In autumn, mallards from some northern countries head south for the winter. Mallards have also been spread even further around the world by people, who introduced them to countries where they aren't naturally found. This includes Australia, New Zealand and South Africa.



Mallards are the ancestors of most farmyard ducks



DUCK DEPARTURES

Mallards aren't the only ducks that will be stretching their wings this spring. Hundreds of thousands of wildfowl spend the winter in the UK, before heading back to their breeding grounds for the summer. This includes lots of ducks like wigeons, teals, pochards and pintails. They come from similar countries to our visiting mallards, particularly northern and eastern Europe.

Whilst lots of ducks are leaving in spring, one species is just arriving! The garganey is the only duck that migrates to the UK for the summer. There are around 100 pairs that nest here. They leave again in autumn and spend the winter in Africa.



This spring, Illumination, creators of Minions, invites you to take flight into the thrill of the unknown with a funny, feathered family vacation like no other in the action-packed new original feature-length film, Migration.

The Mallard family is in a bit of a rut. While dad Mack is content to keep his family safe in their New England pond forever, mum Pam is eager to shake things up and show their kids – Dax and Gwen – and their curmudgeonly Uncle Dan the world beyond the pond. After a migrating duck family alights on their pond with thrilling tales of far-flung places, Pam persuades Mack to embark on a family trip, via New York City, to tropical Jamaica.

But what about the mallards in the UK – do they make incredible journeys and see the wide world, too?

Download your duck-themed activity pack at wildlifewatch.org.uk/migration



ILLUMINATION PRESENTS
MIGRATION
Only In Cinemas

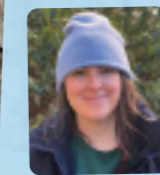
Discover some cunning critters looking for a FREE ride!

HITCHHIKERS

by Alex Dommett

Do you know it's not only humans who can hitch a ride? For their survival, some plants, insects and other creatures use clever tactics to get where they need to go... by travelling on an animal!

Black oil beetle *Triungulin* on *Nomada* bee © David Williams



Alex is known to her family as the bug queen. She loves finding insects, including playing hide and seek with furrow bees in her garden lawn and filming hunting ruby-tailed wasps!



Pseudoscorpion © Will Atkins



Rhagium mordax with pseudoscorpion © Fanki Poch



Triungulin © Nicole Reime

FAKE SCORPIONS

Pseudoscorpions (pronounced soo-do-scorpions) are not scorpions at all – they have no stinging tail. They are an arachnid though, in the same family as scorpions and spiders. Many pseudoscorpions live in temporary places such as rotting leaves and logs, so they need to be able to travel to find a new home. But when you're only 4mm long, even travelling the length of an average garden is a tricky business!

Luckily, their tiny size doesn't hold pseudoscorpions back. They will attach themselves to larger animals to hitch a ride! They cling on to flying species, such as flies, beetles, butterflies and even bats, which unwittingly transport them to a new location.

You can find pseudoscorpions by scouring leaf litter in gardens and parks!

BEE-RIDING BEETLES

The big-bottomed oil beetle has one of the most amazing lifecycles of any insect in the UK! Female oil beetles lay hundreds of eggs in burrows they've dug in the ground. Once the oil beetle larvae (called 'triungulins') have hatched, they need to be transported to the nest of a female solitary bee to survive.

The triungulins climb onto flowers and wait for an unsuspecting bee to arrive, so they can jump on board.

The triungulins cling to the bee with their hooked feet. When the bee returns to its underground nest, the triungulins jump off to gorge on bee eggs, pollen and nectar. They develop into an oil beetle in the bee burrow and emerge in the following spring!

There are five species of oil beetle in the UK. The violet oil beetle and black oil beetle are the most widespread.

MOUNTED MITES

Pseudoscorpions aren't the only arachnids that need a taxi. *Poecilochirus* mites depend on carrion (dead animal carcasses) to reproduce, but their minuscule size makes it difficult to travel to find the next dead creature. Bring on the burying beetle, a striking orange and black beetle that also needs a carrion to survive – the perfect flying ride for a *Poecilochirus* mite!

Mites clamber on to a beetle, hitch a ride to a new carcass, then scurry off and feed and breed on it alongside the beetle. Then the next generation of mites get on board and the process starts all over again!

Burying beetles can sometimes carry as many as 40 mites!

PLANT PASSENGERS

Lots of plant seeds hitch a ride to reach new areas where they can grow, like greater burdock. It has sticky seedheads that attach themselves to our clothing (or our hair – ouch!) as we walk through wild spaces. For this reason, it has many nicknames such as 'sticklebacks', 'sticky Jack' and 'sticky bobs'. These hooked seedheads help the plant disperse its seeds by attaching themselves to the fur of passing animals.

Greater burdock is a tall plant, mainly found in central and southern England. It has thistle-like flower heads (very attractive to insects) which eventually turn into the familiar sticky burrs with their large hooks!

Velcro was inspired by a burr-shaped seedhead just like this one.



Microphorus investigator with mites © John Bridges



Greater burdock on a horse's mane © Edwin Gespers / naturepl.com

INCREDIBLE INTERACTIONS

Nature is a great big, complicated web of life! Everything is connected. All living things play a role in keeping wild places healthy and balanced. Each issue, we'll take a look at how different plants or animals affect the wild world around them.



MOTHS AND BUTTERFLIES



Elephant hawk-moth © Vaughan Matthews

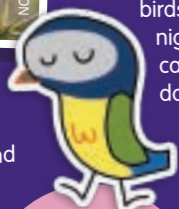
Dark green fritillary © Jim Higgins



Blue tit © Richard Steel / 2020VISION

FLYING FOOD

It's not just the caterpillars that are an important food supply. Lots of animals eat adult butterflies and moths, from birds to spiders. Bats and nightjars are skilled at catching moths in the dark. Scientists studying one population of nightjars found that moths made up 65% of their diet – so without many moths around they'd be pretty hungry!



Blue tits in the UK are thought to eat 50 billion caterpillars a year!

POLLINATOR POWER

Moths and butterflies are excellent pollinators. They spread pollen from flower to flower, helping plants to grow fruits, reproduce and create new plants. In a recent study, scientists found that moths may be better at pollinating than day-flying insects like bees! Without pollinators, plants would struggle to reproduce and we wouldn't be able to get food from them.



© Paul Hobson

HAPPY HUMANS

We're a part of the wild world too! Moths and caterpillars help create our food through pollination, but they also help us in other ways. Do you smile when you see a beautiful butterfly? Spending time in nature is good for us, and lots of people go out looking for butterflies and moths. Because butterflies are so popular, many people try to make their gardens more welcoming for them. This helps lots of other wildlife, too.



Greater horseshoe bat © Stephen Dalton / nature.com



Silver-studded blue © Chris Donnell / 2020VISION

BEAVER BEHIEVERS

BEAVERS were once extinct in the UK, but now they're back! They live in the wild again in Scotland and England.



© Nick Upton / Cornwall Wildlife Trust

Don't let their size FOOL you!

SMALL BUT MIGHTY

by Izzy Sharpe



Izzy is The Bay project's trainee and helps connect people around Barrow-in-Furness with nature. They love all wildlife and enjoy filming as much as they can!

Size isn't everything in the animal kingdom. Tiny creatures can punch above their weight in strength, noise or their impact on the world.

WREN

The wren is a tiny brown bird found in many different habitats across the UK. Weighing around the same as a £1 coin, with a wingspan of 13 to 17 centimetres, the wren is one of the UK's smallest birds. But for its size, it has a remarkably loud voice. Relative to its weight, the wren sings ten times louder than a cockerel!



© Andy Rouse / ZOOVISION

ANTS

In the UK, ants typically emerge in early March and go back underground in November. Ants are famous for their strength – they can lift ten times their own body weight! This is because very little muscle power is required to hold up their small and light body, leaving plenty of strength to lift heavy objects. If ants were bigger, they wouldn't be as strong for their size because they would be heavier!



© Vaughan Matthews

WEASEL

Weasels are the world's smallest carnivore! You can find them in lots of different habitats in the UK including moorland, grassland and woodland. They have an incredibly powerful bite. Relative to its size, the weasel has a stronger bite force than tigers, lions and all the bears. In fact, among living carnivorous mammals, the weasel's bite is second only to the Tasmanian devil, which is adapted to crushing bones.



© John Brides

MANTIS SHRIMP

Mantis shrimp are known for their powerful punch. The peacock mantis shrimp springs out its club-like claws 50 times faster than the blink of an eye and is strong enough to break glass. Although this species is found in the shallows of the Indian and Pacific Ocean, two species of mantis shrimp can be found in waters around the south coast of the UK. These mantis shrimp have spears instead of clubs and are a little slower, but still fast enough to stab passing prey.



© Steve Trewthella

COMMON FROGHOPPER

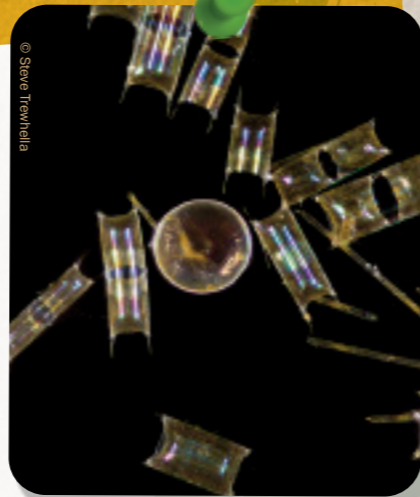
The froghopper or spittlebug is a small insect that looks a bit like a leaf. Their larvae produce the "cuckoo-spit" you find on a wide range of plants across the UK. For their size, they are the world's highest jumping animal. They can jump over 100 times their body length! That's like a human jumping over two Big Ben towers stacked on top of each other.



© Brian Everham

PLANKTON

Phytoplankton are microscopic, single-celled, plant-like organisms that live in the topmost layer of the ocean, where sunlight is plentiful. These tiny organisms form the bottom of the entire oceanic food web and are crucial for life on earth! They turn sunlight into energy by photosynthesis, just like many plants do. They are then eaten by larger zooplankton (animal plankton), which are in turn eaten by fish and even ocean giants like the blue whale!



© Steve Trewthella

MOSQUITO

Mosquitos are flies found almost everywhere except cold Antarctica. They are only around half a centimetre in length but have a huge impact on animals, including humans, in many parts of the world by transmitting deadly diseases. The silver lining is that clouds of mosquitos form a reliable food source for thousands of animals in both air and water.



© Brian Everham

LESSER WEEVER FISH

Lesser weever fish are common in sandy and muddy seabeds all around the UK. They are one of the few venomous fish to be found in the UK! They spend most of their lives buried in the sand, but when disturbed they raise a row of venomous spines along their back, delivering a painful sting! Impressive for a fish that is only 15 cm long.



© Paul Naylor / naturephoto.co.uk

GALLERY

Send in your photos, poems, artwork and letters for your chance to feature in the gallery. If your artwork is picked as the star entry you'll win your very own drawing kit! **The perfect starter set for any budding wildlife artist.**

1



2



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8



1) Haircap moss by Elinor, aged 8 ★

We love that Elinor has chosen to draw a species that's easily overlooked – and done such a great job!

2) Robin by Daisy, aged 11

This is such a cheery robin! It's lovely to see signs of spring, with leaves on the twigs.

3) Fox by Beth, aged 10

Beth has really brought this fox to life with some great splashes of colour.

4) Woodland cake by Alice, aged 9

We don't see many wild cakes, so we were really impressed by this forest-themed bake.

5) Fungi by Lara, aged 12

What a wonderful use of colour to frame these fantastic fly agarics!

6) Shark by Nicholas, aged 9

Nicholas has given us a glimpse beneath the waves with this superb shark.

7) Bee by Maria, aged 8

Maria has perfectly captured this bee, from the antennae to the black and yellow stripes.

8) Heron by Isabel, aged 10

The posture of this heron is perfect – it's really hard to draw a neck like that!

9) Pine marten by Sylvie, aged 10

Sylvie's artwork shows just how good pine martens are at climbing.

10) Mouse by William, aged 8

Look at the ears on this adorable mouse! Great photo, William.

11) Garden collage by Oscar, aged 4

Oscar has been really creative as he produced this garden scene.

12) Owl by Josephine, aged 8

We love how much personality this owl has! It's named Flocon after the French for snowflake.

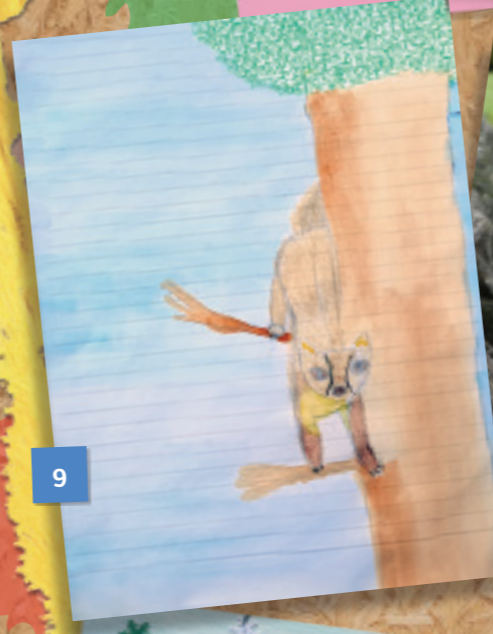
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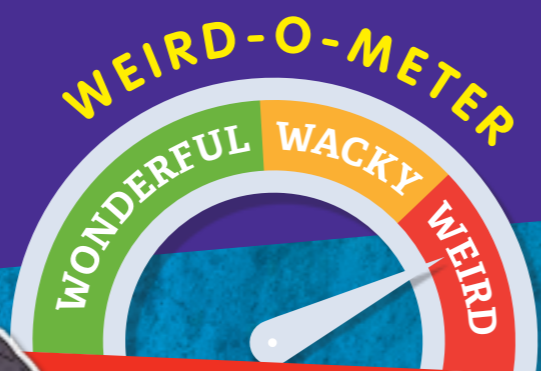
If we feature your artwork we will need your first name and your age, so don't forget to include them. We might also share it on our website and social media.

HOW TO ENTER

Email watch@wildlifetrusts.org with the subject line 'Gallery entry' or write to us at:
Wildlife Watch Gallery
The Wildlife Trusts
The Kiln, Mather Road
Newark
Notts NG24 1WT

WEIRD NATURE

THIS ISSUE: WEIRD NOSES



MOLE



Moles have a nose for worms, with a strong sense of smell for sniffing out food in the soil. But those long noses have another trick! The skin in a mole's snout contains special sense organs, called Eimer's organs. They improve the mole's sense of touch and help it feel its surroundings.

GREATER HORSESHOE BAT



These bizarre-looking bats are named after their horseshoe-shaped nose. It might look weird, but it's not to be sniffed at as it helps them hunt! The shape helps focus the bat's echolocation calls to find moths and flying beetles in the dark.

BLUE SHARK



Just like us, sharks have two nostrils. But unlike us, they don't use them for breathing – they're purely for smelling. Sharks have lots of amazing senses, including a strong sense of smell. It seems to be most powerful in sharks that live in the open ocean, or travel long distances like the blue shark.

COMMON SHREW



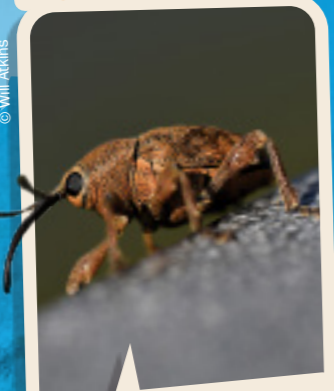
Shrews are easily recognised by their long, pointy snouts. Unsurprisingly, with a nose like that, they have a strong sense of smell. But shrews may have another trick for finding their way around. Some scientists think they use high-pitched calls for a rough form of echolocation.

GANNET



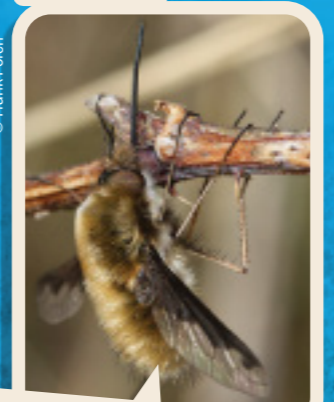
When you plunge face first into the sea at 50mph, you need a pretty tough nose. Most birds have nostrils on top of their beak, but gannet nostrils are fused shut to stop water rushing in when they dive. Instead, they use a second pair of nostrils in the corner of the mouth, which they can close whilst diving.

ACORN WEEVIL



Weevils are a type of beetle famous for their super-sized snout, which scientists call a 'rostrum'. It's not technically a nose, as it has mouthparts at the end of it. Female acorn weevils have an extra-long rostrum. They use it to drill holes in acorns, so they can lay eggs inside of them.

DARK-EDGED BEE-FLY



Bee-flies look like they're flying around with a sword for a nose! This is actually a tongue-like mouthpart, known as a proboscis. They use it to feed on nectar from flowers. You can see dark-edged bee-flies in early spring. When they aren't whizzing from flower to flower or sunbathing, they hunt for bee nests they can flick their eggs into.

BOTTLENOSE DOLPHIN



Did you know dolphins and other toothed whales talk with their nose? They make sounds by pushing air through special folds in their nasal passages, similar to the way humans speak by pushing air over our vocal cords.

Build a beetle bank

You will need

- Stones or garden hose
- Topsoil
- Wheelbarrow
- Spade
- Grass seed or wildflower meadow seed (with 80% grass) or turf

Beetle banks are used in farmland to boost insect diversity and natural pest control – but you can build one in your own garden! Adding both shady and sunny habitat, they're valuable to flat gardens, providing a home for lots of invertebrates.

1 Pick a sunny spot for your beetle bank (ideally around 1m long) and mark it out with straight or curved lines using stones or a garden hose.

2 Spread the topsoil evenly inside the markings, treading it down after each 10–15cm deep layer to compact the soil.

3 Keep building a mound until it is at least 30cm high and wide. The top can be flat or rounded.

4 Once you have created your mound, sow your seed and firm it down with the back of a rake. If using turf, lay this over the mound and firm down.

5 Keep your bank watered in dry weather. On seeded banks, use a fine spray to avoid eroding the soil.

6 Let the grass grow long all summer. Cut it back in October to approx. 5cm high.

Look out for minibeasts – from busy ants to scurrying beetles, grasshoppers and even small solitary bees!

www.wildaboutgardens.org.uk

Illustration: Corinne Welch © Copyright Royal Society of Wildlife Trusts 2021





Meet the masters of mimicry

CHEER TRICKS!

by Pete Dommett



JAYS often copy the calls of buzzards, but no-one really knows why! Do they mimic this big bird of prey to scare smaller birds away from food? Or is it to warn others that an enemy is around? Or perhaps it's to confuse the predator itself! What do you think the reason is?



The croaking call of a pheasant, the high-pitched cry of a buzzard and the distant hoot of an owl. These aren't unusual noises to hear in the wild... *except* when they're all being made by the same bird!

Several species of bird in the UK can copy the calls and sounds made by other birds. They then include samples of these musical melodies in their own spring songs. This tuneful trick is known as vocal mimicry.

IMPRESSIONS TO IMPRESS
But why do they do this? Well, it's mainly to show off! Most of the time, male birds sing to impress females. A catchy tune, full of bits of brilliant mimicry, makes them even more attractive to potential partners. It's really the male's way of saying "Hey, listen to me! I'm really clever and I'd make a great mate!" And it works! Female birds often choose males with the most complicated songs.

SOUND COLLECTORS
Birds spend hours listening to the songs of other species that live in the same area as them. They learn these different tunes and sometimes add parts of them to their own playlists. They will also mimic more unusual sounds from their surroundings, including animal calls and all sorts of man-made noises!

DID YOU KNOW?
Both starlings and jays have been recorded mimicking human voices!
The famous composer, Mozart, had a pet starling. He trained it to copy tunes and mimic melodies!

NOW YOU TRY!
Listen to the song of a starling. Can you make out the calls of any other birds in its performance?

MASTER MIMICS



About 30 different species of birds in the UK use mimicry in their songs, but these are three of the absolute masters!

COMMON STARLING



If it's variety you're after, it's hard to beat a starling! Tawny owl, buzzard, pheasant, curlew, lapwing...it can imitate them all! But it's not just other birds that are copied - a starling's song might also include the sounds of car alarms, miaowing cats and even crying babies!

MARSH WARBLER



These little brown birds spend the winter in Africa. They return to Europe in late spring to breed, but only a few pairs fly back to the UK. Their loud and rapid songs include the sounds of African birds the warblers have heard on their holidays, such as hornbills, puffbacks and helmet-shrikes!

COMMON REDSTART



This summer visitor to the UK is one of the quickest copycats around. A study of its song showed that this speedy species can mimic more than 50 different birds in under an hour!



Kieron has worked for Derbyshire Wildlife Trust for the past 25 years and has a passion for wildflowers. He helps protect wild places from being destroyed.



DISCOVER THE TRENDSETTERS THAT TRANSFORM THEIR WORLD!

PIONEER PLANTS

by
**Kieron
Huston**

WILD CHANGES

Plants grow together in different 'communities' and sometimes these change over time, such as when a grassy area eventually becomes a forest. This process is called succession. In some cases, succession will start with bare ground and end with trees. In other places, the conditions may not be right for trees, so grasses, flowers and smaller shrubs may take over!

Sea rocket © Niall Benne / naturepl.com



LEADING THE WAY

When you start with bare ground, like in young sand dunes or abandoned building sites, you need some special plants to get things moving. The first plants to take advantage of bare ground are called pioneers. They are plants that produce lots of seeds that are spread by wind, water, or animals. This helps them get around and find new places to grow.

Pioneer plants grow quickly and often live for just one year. By being first they do not have to compete with other plants to find enough food, light, and space. In time, however, more competitive and long-lived plants start to appear. The conditions change, becoming less favourable to the pioneer plants and the plant community changes too.



Common grasses on a beach © Terry Whiteaker / 2020VISION



Sea rocket © Robert Thompson / naturepl.com

Let's take a LOOK at the some of the pioneer plants in different wild places!



© Eirian Evesham

Sand couch-grass

Pioneer species such as sand couch-grass and sea rocket are amongst the first plants to colonise newly forming sand dunes. Their thick waxy leaves and rolled stems help them cope with the very salty and windy conditions. Their roots help make the dunes more solid, forming barriers to the wind, which allows more sand to build up and other plants to grow.

The caterpillars of the rare sandhill rustic moth feed on sand couch-grass.



© Catherine Williamson / naturephotography.com

Sea kale

Sea kale is a type of cabbage and is a pioneer on shingle beaches. It has lots of adaptations to help it thrive in this tricky habitat, including thick, waxy grey-green leaves that reduce water loss. It also has a deep root (up to two metres) that helps it reach the freshwater far below the ground. Its large seeds float, which helps them spread in the sea to reach new areas of beach. Various flea beetles, weevils and white butterflies feed on this plant.



© Terry Whiteaker / 2020VISION

Glassworts

Glassworts (there are many similar species) can tolerate very salty conditions. They grow in saltmarshes, preferring areas with plenty of mud. They form part of a pioneer plant community that makes the mud more stable, making it easier for other plants to grow there too. Glassworts are also an important source of food for birds and some moth caterpillars.

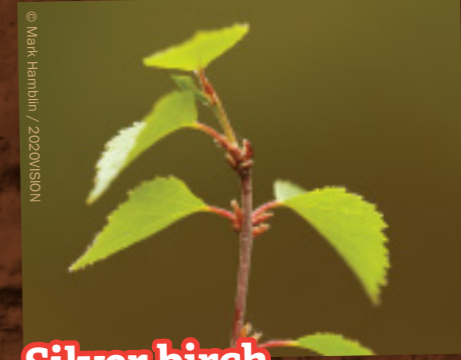
In some areas, glassworts are eaten by people as well!



© Jon Hawkins - Surrey Hills Photography

Bird's-foot-trefoil

Common bird's-foot-trefoil is a small, yellow-flowered pea that is found across the British Isles. It is often one of the first plants to grow in former quarries and in bare, rocky habitats. Over time, this plant makes the soil richer by adding nutrients. This helps it to grow, but also allows other plants to gain a foothold. It is an important source of nectar for mining bees and a foodplant for the caterpillars of common blue and dingy skipper butterflies.



© Mark Hamblin / 2020VISION

Silver birch

Silver birch is a deciduous tree that can colonise bare ground. It is often one of the first trees to appear in old quarries, abandoned building sites and forest clearings. It produces lots of seeds that can travel long distances on the wind. It has a short life for a tree, but once established it can carry on for many generations. Once silver birch is tall enough, it will be used by birds for feeding and nesting.

SHANNY

by Sophia Taylor



Sophia is a Bangor University student, on placement with North Wales Wildlife Trust's marine team and is also a lover of grey seals!

© Linda Pitkin / 2020VISION



FISH FEAST

Shannies are one of nature's hoovers. They'll eat almost anything they can get their hands (or fins!) on, from seaweed to fresh shrimp. You might find them hard to spot when they're lying still, because their amazing camouflage lets them blend in with the rocks around them. This helps them catch their food, as their prey can hardly see them coming. But it also works to hide them from bigger fish and other animals that might want to eat them. Clever, hey?

COASTAL COLOURS

If you think you need to go to a tropical island to see colour-changing fish, you'd be wrong. The shanny can do it too! In the breeding season, the male shanny changes from his usual brown patchy colours to a deep black like the night sky, and his lips turn bright white. You can see these fantastic fish all around the British Isles. Your best chance is to have a good look in some rockpools—be careful, though, as shannies can bite!

ROCKPOOL RESIDENT

What's hiding beneath the surface in the UK's rockpools? If you've ever spotted a feisty little brown fish, it may just be the shanny! Otherwise known as the common blenny, this little fish prefers shallow water and loves to hide among rocks on the shore when the tide goes out. But what do they do if they can't find a rockpool in time?

SHORE TO SURVIVE

Shannies have the marvellous superpower of surviving in any little crack or crevice in the rocks, biding their time until the water returns. As long as their hidey hole is damp and sheltered from the wind and sun, they can stay there for hours. These hardy fish are born survivors. They're sometimes known as "sea frogs" because of this skill – and if you startle them, they might leap back into the water, just like a frog does.

ESSENTIAL FACTS

Scientific name

Lipophrys pholis

Size

Up to 17cm

Amazing fact

Male shannies guard the eggs once laid, keeping them safe from hungry predators for over a month!

© Paul Naylor / marinephoto.co.uk



WHAT CAUSES TIDES?

by Phil Green



Phil studied ocean science at university. He loves photographing wildlife, especially birds.

Sea shore © Mark Hamblin / 2020VISION



WHAT ARE TIDES?

Have you ever been to the seaside and noticed that sometimes the sea is close to the top of the beach, and sometimes it's far away? The ocean is constantly moving and the rise and fall of sea levels is known as a tide. The sea level moves between its highest point (high tide) and its lowest point (low tide). This change is called a tidal cycle.

Depending on where you are in the world, the number of tidal cycles per day can vary. In the UK, it is very normal for us to experience two tidal cycles in one day – two high tides and two low tides. However, other places in the world may only have one tidal cycle per day.

MOON-TOUCHED

Tides are caused by the moon! More importantly, the pull of the moon's gravity. The moon pulls the ocean slightly towards it and creates a bulge in the water. This bulge is what causes the high tide. Because it is pulling water from other parts of the world, they will experience a low tide. The earth rotates, which means the bulge of water caused by the moon will move across the earth. This is why we experience a rise and fall in the sea level at different times in the day.

The difference in height between high tide and low tide is known as the tidal range.



When the moon is here, we get spring tides

When the moon is here, we get neap tides

DOUBLE TROUBLE

But the moon is not the only thing pulling on the earth! The sun has a gravitational pull, which affects tides too. If the moon, the earth and the sun are all lined up, the gravitational pulls from the moon and sun combine to create an even bigger bulge in ocean water.

This creates an unusually large tide, which we call a 'spring tide'. In a spring tide, the high tides are extra high and the low tides are extra low.

If the moon and sun are not in line and are at right angles to the earth, their gravitational pulls cancel each other out slightly. As a result, we only get a small bulge of water. This creates a smaller tide called a 'neap tide', where there is a much smaller difference between high tide and low tide.

The Bristol Channel has one of the highest tidal ranges in the world at 12-14 metres!

SUN

COMPETITIONS

WIN SMALL, SPECKLED EGG

This beautiful, fact-filled picture book follows the life cycle of an Arctic tern. It starts with a small, speckled egg and builds to the bird's incredible journey to Antarctica. The book also includes a fold-out map with a fun I-Spy game.

We've got **FOUR** copies to give away

Buy online at mamamakesbooks.com
RRP: £10.99

FOR YOUR CHANCE TO WIN:

Draw an egg. It could be the egg of a real animal, or a super-colourful one from your imagination!



WIN BEE BOXES

Bring bees to your garden with this colourful set of three seed boxes from Seedball. Each box contains a different bee-friendly wildflower mix. Just scatter the seedballs on some soil and let nature do the rest! The colourful flowers will be great for lots of other wildlife, too.



We've got **FOUR** sets to give away!

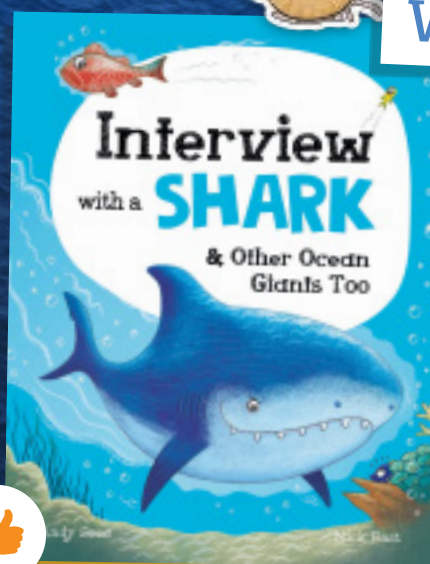
Buy online at seedball.co.uk
RRP: £9.00

FOR YOUR CHANCE TO WIN:

Tell us which of these pioneer plants grows on saltmarshes:
a) Silver birch
b) Glassworts
c) Bird's-foot-trefoil

WIN

INTERVIEW WITH A SHARK



If you could talk to animals, what would you ask? The Interview with... series by Andy Seed and Nick East is a set of funny fact books where animals do the talking, with Q&A interviews, illustrations and bite-size info! In this book, you can meet a shark – but other books in the series let you meet a tiger, kangaroo or panda!

We've got **FOUR** copies to give away!

Buy online at wtru.st/interview-shark RRP: £9.99

FOR YOUR CHANCE TO WIN:

Tell us what question you would most like to ask a shark!

If you're sending multiple entries, please try to put them in one email to save energy!

COMPETITION RULES

Send your competition entries to us: **By email** watchcomps@wildlifetrusts.org **By post** Wildlife Watch, The Kiln, Mather Road, Newark, Nottinghamshire NG24 1WT
Don't forget to include your name, age and a way of contacting you about your entry! **DEADLINE: 31 May 2024**

Competition entries may be used on our website and social media channels.